Pig Iron taken from Blast FurmuMJ.				On bring poured into the. mixer, the, metal contained		On being poured into the coavertor, tho metal eoutained	
Time.	L'ig iron, Kg.	Mu.	s.	Mn.	s.	Mn	s*
2-0	31,350	1-03	0-19	Q-85	0-10	___	__ _
2-45	33,050	1-17	0-17	0-92	0-09	-----	—
3-30	32,350	1-97	0-08	1-42	0-06	_	. —
4-30	10,400	1-13	0-20	0-86	0-10	-----	— .
5-03	_	—	—	_	—	0-90	0-04
5-32	. —	—	_	_	__	0-90	0-06
5-30	44,700	1-08	0-19	0-98	0-14	_	_
5-54	- —	— .	__	—	—	0-89	0-04
6-18	^ —	_	_	—	—	0-84	0-04
637	—	_	— .		_	0-89	0-05
0-45	22,800	1-55	0-12	1-08	0-09	—	_„
0-50	_	—	—	._,	—	0-84	0-04
7-00	21,700	1-22	0-17	0-97	0-11	—	_
7-10	—	_	—	_	_	0-84:	0-05
7-30	_	—	—	—	—	0-84	0-05

slowly, and is accompanied by considerable expense in manganese. In a South Bussian iron works, for example, a charge of 20 tons which contained 0*50 per cent. S and 0"40 per cent. Mn, required additions of a total of 1,100 kilogrammes of 20 per cent. Spiegeleisen and 2,100 kilogrammes of 80 per cent, ferro-manguneso in successive instalments in the course of three hours, reckoned from the end of the decarbonisation. The final product contained 0"05 per cent. S and 0*71 per cent. Mn.

Manganese ore acts similarly to metallic manganese, and after its solution in the slag and its being reduced by carbon small amounts of manganese are always brought into tho metallic iron, which then react on the sulphur in it. A. lliemer gives an example thereof in " St. u. E.," 1902, p. 1861, in which 16,400 kilogrammes pig iron with 0"84to 0*92 per cent. S and 0*42 Mn was worked. The metal was charged with an addition of 2,100 kilogrammes iron ore and 2,800 kilogrammes manganese ore, and showed directly after melting down a content of 0"22 per cent. S, 0*18 per cent. Mn and 0*04 per cent. C. An ordinary charge would have now at most